

## SHORT REPORTS

## Job loss and first pregnancy in young women

The integration of women into the workforce in Britain was accelerated by the shortage of male labour during both world wars. In 1965 Gavron found that 80% of working class women continued in paid employment even after marriage.<sup>1</sup> What happens, however, when a young wife is suddenly made redundant and finds, in a harsh economic climate such as we have now, that her chance of finding other work is small? Is the decision to start a family postponed or promoted? In this small study we report on a group of young married women facing such a dilemma. The null hypothesis for testing was that the incidence of first pregnancy during the months after compulsory redundancy is no different from that found in the whole population of contemporaneous married, nulligravid women.

## Subjects, method, and results

During 1982, 302 workers were made redundant when a local factory closed.<sup>2</sup> Of these, 103 were women registered as patients in our practice; 10 were married and aged below 30 at the time of redundancy (only 6% of women in our practice conceive their first born when older than this). Two had been under investigation for primary infertility since 1979 and were omitted from the study. Of the

Fisher's exact test, however, we found a significant difference between the proportion of women in each group who conceived within the study period ( $p=0.02$ ). The disparity was due to the increased tendency of the women who had been made redundant to start a family soon after the notification of redundancy.

## Comment

Motherhood may seem an attractive proposition when 906 000 other women are seeking paid employment, as was the case in Great Britain in 1982,<sup>4</sup> and our results suggest that this is so for a high proportion of newly redundant young women. The primigravida recently thrown out of work cannot overlap the dual roles of worker and expectant mother and is denied a period of helpful adaptation at a costly and stressful time.

We would like to pose two questions. If large numbers of unemployed women are allowing themselves to fall pregnant by a process of "negative" family planning—"I may as well..."—will it precipitate an increase in rejection of the infants, puerperal mental illness, and child abuse? Secondly, are not these same women, by becoming pregnant, inadvertently disguising the real extent of female unemployment?

*Details of nulligravid women born during 1955-62, registered with the practice and married for a minimum of two years on 19 May 1982*

	Median age (years)	Median duration of marriage (years)	No who conceived during May 1982 to January 1984
Women made redundant (n=6)	23	4	4
Control group (n=54)	24	3	10

remaining eight married women under 30, one was already pregnant and one was being treated for reactive depression after marital breakdown; these two were also excluded.

Thus six of the women were under 30 and married (for two to seven years) but still nulligravid at the time of the announcement of the redundancies (19 May 1982). All six were using oral contraception at that time. Two of the women continued to use this contraceptive technique, but the others withdrew from the pill and conceived within 14 months.

As a control group we studied all other women in the practice who had been married for a minimum of two years, had been born during 1955-62 inclusive (as had the study subjects), and were yet to conceive their first child. Any of the control women already under investigation for infertility or for whom there was any intimation of serious marital disharmony were omitted.

The 21 months May 1982 to January 1984 inclusive were adopted as the comparative study period on the basis of the work of Vessey *et al.*<sup>3</sup> They showed that only a further 7.6% of 1174 nulligravid women conceived later than 21 months after stopping oral contraception. The incidence of first pregnancy during the study period was then calculated for both the unemployed and control groups (table).

Using the Mann-Whitney U test, we found no significant differences between the median ages or the median durations of marriage of the two groups. Using

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1 Gavron H. *The captive wife*. London: Routledge and Keegan Paul, 1966.

2 Beale N, Nethercott S. Job-loss and family morbidity: a study of a factory closure. *J R Coll Gen Pract* 1985;35:510-4.

3 Vessey MP, Wright NH, McPherson K, Wiggins P. Fertility after stopping different methods of contraception. *Br Med J* 1978;ii:265-7.

4 Hawkins K. *Unemployment*. Harmondsworth, Middlesex: Penguin, 1984.

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## The Health Centre, Calne, Wiltshire SN11 8NQ

NORMAN BEALE, MA, MRCP, general practitioner  
SUSAN NETHERCOTT, MSC, statistician

Correspondence to: Dr Beale.

## Results of delayed follow up of abnormal cervical smears

Recently we analysed the outcome (to October 1983) in 1062 women who had a first report of abnormal cervical cytology in 1981.<sup>1</sup> Satisfactory follow up was documented for only 628 (59%), although a further 275 (26%) had one subsequent normal smear; 43 women had not been asked to have a further smear, and seven had refused an invitation for a further smear. Further efforts were made to contact these 50 women, and we present the results up to October 1985, a minimum of three years and eight months after the first abnormal smear. In all these patients the initial smear had shown mild or moderate atypicalities. Patients with highly atypical cells had all been satisfactorily followed up as a result of laboratory initiatives.

## Patients, methods, and results

Intensive searches were carried out using the records of the cytology department, City Hospital, Nottingham, and the corresponding histopathology records, and by correspondence with the clinician who first detected the abnormal smear and to relevant general practitioners.

Among the 50 patients the current state remained unknown for two who had

left the district and seven who had not had a further cervical smear identified in the laboratory by October 1985. The remaining 41 patients had had a follow up smear. Of these, 12 patients (29%) had a histological abnormality of cervical intraepithelial neoplasia grade II or worse: three had grade II and seven grade III lesions, one had a microinvasive carcinoma, and one had stage I invasive carcinoma; for both these last two patients first follow up was three years and 10 months after the previously abnormal smear. The proportion of abnormal histological findings was 25% in those followed up less than three years after the first abnormal smear and 33% in those from whom biopsy samples were taken more than three years later (table). Follow up was achieved in all seven patients who had refused initial invitations; of these, two showed cervical intraepithelial neoplasia grades II and III, a similar proportion to that in patients who had not originally received invitations for follow up.

## Comment

These results show that women who have had one cervical smear showing mild or moderate atypicality, and who have not been promptly followed up, have a 29% chance of harbouring a lesion of cervical intraepithelial neoplasia

## Outcome of delayed follow up in 50 women with abnormal cervical cytology

Time until follow up	Invasive carcinoma	Microinvasive carcinoma	Cervical intraepithelial neoplasia		Total with abnormalities	Subsequent normal cytology*	Unknown
			III	II			
≤3 years			5		5	15	2
>3 years	1	1	2	3	7	14	7
Total	1	1	7	3	12	29	9

\*Including five with persistent minor atypicalities and one with benign warty changes.

grade II, or more severe, with 22% having grade III or worse and an estimated 5% having microinvasive or clinical or occult invasive carcinoma. These results confirm our original disquiet that inadequate follow up of patients with even a single, relatively mild abnormality is unacceptably dangerous. This conclusion is highlighted by studies of patients with invasive cervical cancer, which have shown that failure to follow up cytological abnormalities occurred in around 15% and was a more common problem than that of false negative smears.<sup>2,4</sup> Kinlen and Spriggs studied 101 women with atypical smears in the early 1970s<sup>5</sup>; they re-evaluated 60 of these after at least two years and found 33 (55%) with persistent or advancing disease: 20 had dysplasia or carcinoma in situ and three microinvasive, three occult invasive, and seven clinically invasive cervical cancer.

We previously identified the reasons for lack of follow up in our patients, and since then the problem has been reduced by better record systems and communications among the laboratory, hospital clinics where smears are taken, and general practitioners. Among the 50 patients described here the failure of initial follow up was due to communication difficulties in 43 instances and to patient refusal in only seven. All these seven patients who initially refused accepted a further invitation after being given information about cytology and the methods by which an abnormal smear could be dealt with.

We conclude that patients who have any degree of abnormality in a smear

constitute an extremely high risk group; every effort should be made to reassess these women.

- 1 Elwood JM, Cotton RE, Johnson J, Jones GM, Curnow J, Beaver MW. Are patients with abnormal cervical smears adequately managed? *Br Med J* 1984;289:891-4.
- 2 Ellman R, Chamberlain J. Improving the effectiveness of cervical cancer screening. *J R Coll Gen Pract* 1984;34:537-42.
- 3 Chisholm DK, Haran D. Cases of invasive cervical cancer in the north west in spite of screening. *British Journal of Family Planning* 1984;10:3-8.
- 4 Chamberlain J. Failures of the cervical cytology screening programme. *Br Med J* 1984;289:853-4.
- 5 Kinlen LJ, Spriggs AI. Women with positive cervical smears but without surgical intervention. A follow-up study. *Lancet* 1978;ii:463-5.

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Department of Pathology, City Hospital, Nottingham NG5 1PB  
R E COTTON, MD, FRCPATH, special professor and consultant

Department of Community Medicine and Epidemiology, Medical School,  
University of Nottingham, Nottingham NG7 2UH  
J M ELWOOD, MD, DSC, professor and honorary consultant  
GAIL M JONES, BMEDESCI, medical student

Correspondence to: Professor Cotton.

## Radiology for psychiatric patients?

An audit of chest x ray examinations,<sup>1</sup> skull x ray examinations, and computed tomography<sup>2</sup> suggested overuse of chest and skull x ray examinations. We repeated the audit and report our results.

### Patients, methods, and results

Notes on 1007 consecutive patients aged 16-65 admitted to a district general hospital's psychiatric unit between 1 January 1983 and 31 April 1984 were examined to identify the use of chest and skull radiography and computed

previously. One radiograph was abnormal compared with two previously (table). The abnormality, an old fracture known from the history, was the reason for the examination. Management was not altered by the finding.

Computed tomography was conducted on 33 patients (3%) compared with 13 (1%) previously; results were abnormal in 12 cases (36%) compared with four (31%) before. All patients with abnormal reports had evidence of organic neurological disease in their history or on examination, according to criteria described by Roberts and Lishman.<sup>3</sup> In no case was management altered because of computed tomographic findings, although in several confirmation of structural abnormality was desired. Thirteen of the 21 patients with normal results on

### Use of radiography in patients admitted to psychiatric unit

	No of admissions	No (%) in which procedure performed	Abnormal x ray films			
			No	% Of examinations	% Of admissions	No in which clinical findings positive*
Chest radiography:						
Previous study	746	231 (31)	21	9	2.8	21
Present study	1007	136 (14)	32†	24	3.2	31
Skull radiography:						
Previous study	1691	111 (6.6)	2	2	0.1	1
Present study	1007	38 (3.8)	1	2	0.1	1
Computed tomography:						
Previous study	1691	13 (0.8)	4	31	0.2	4
Present study	1007	33 (3.3)	12‡	36	1.2	12

\*Abnormal findings in history or on clinical examination.

†Infective changes (12 cases), emphysema (six), cardiomegaly (six), fractured ribs (four), suspected active tuberculosis (three), pleural calcification (one), and pleural effusion (one).

‡Cortical atrophy (eight cases), cerebral infarction (two), hydrocephalus (one), periventricular lucency (one), and localised attenuation deep in a cerebral hemisphere (one). (A table giving more details is available from AJW.)

tomography of the head (EMI 1010). If a report of a chest or skull x ray film had described significant abnormality the clinical findings in the notes were abstracted.<sup>3</sup> The notes on all computed tomograms were examined.

Chest radiography was performed on 136 patients (14%) compared with 231 (31%) previously. Results were abnormal in 32 cases (24%) compared with 21 (9%) before (table). One report of infective shadowing was unsuspected and necessitated treatment. This and another case of infective changes were judged to have precipitated or perpetuated the episodes of mental illness, hypomania, in each case. No other finding was unsuspected.

Skull radiography was carried out on 38 patients (4%) compared with 111 (7%)

computed tomography had clinical evidence of organic brain disease. Their diagnoses were: affective psychosis (eight cases), organic psychosis (three), and schizophrenia (two). The remaining eight had atypical or prolonged affective psychoses (six cases), schizophrenia (one), and personality disorder (one).

### Comment

Two studies have shown a reduction in the use of radiography. Reductions of 40% and 27% in the use of chest radiography in surgical wards of two